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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/516,710 | 12/03/2004 | Nobuaki Ishii | Q70519 | 6748 |
| 23373 | 7590 | 05/10/2006 | EXAMINER | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | LE, HOA T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1773 | |

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/516,710

Applicant(s)

ISHII ET AL.

Examiner

H. T. Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) 27-30 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/2004.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Newly submitted claims 27-30 directed to an invention that lacks unity with the invention originally claimed for the following reasons: The original claims have been rejected, as set forth in the previous office action, indicating that they are not inventive; therefore, these two sets of claims (the original and newly added claims) are not so linked as to form a single inventive concept under PCT Rule 13.1.

2.1 Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections

3. Examiner's Comment/Clarification

3.1 All occurrences of "mm" as appeared in the last office action should have been "μm". The examiner had forgotten to change the first letter "m" in "mm" to a Greek symbol font (μ) when editing the office action. Any confusion caused by this oversight is regretted.

4. **Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by WO-Ishii patent (WO 02/22098) or US-Ishii patent (US 6,500,415) as applied to the rejection to claims 1-4 set forth in the last office action and further discussed below.**

Claims 1-4: See last office action.

Claims 5-6: See WO-Ishii patent, page 29 or US-Ishii patent, col. 8, line 55 to col. 9, line 2.

Claims 7-12: See WO-Ishii, claims 13-15.

Claims 13-19: See WO-Ishii, examples 8-10 (Table 7, page 62).

Claims 20-26: See WO-Ishii, claims 1-3 and 21-22;

Claim Rejections - 35 USC § 103

5. **Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the WO-Ishii patent (WO 02/22098) or US-Ishii patent (US 6,500,415) in view of the Takeshi patent (JP 2000-319,128).**

5.1 The Ishii patents teach the claimed invention as discussed above. Takeshi teaches utilization of silica-coated zinc oxide fine particles in various resin composition for from adhesives to molded materials. See Takeshi, paragraph [0020]. It would have been obvious for one having ordinary skill in the art to employ silica-coated zinc oxide particles as taught by Ishii in resin compositions as taught by Takeshi because Takeshi states that the high UV shielding effect and photo-catalytic activity of silica-coated zinc oxide particles make them ideal as fillers or plasticizers in resin and molding compositions.

Response to Arguments

6. Applicant argues that claimed particles, in which large particles of 5 μm or more account for 0.1 mass% or less, are achieved by employing a dry-format classification to eliminate large particles, while “[n]either WO ‘098 nor Ishii ‘415 discloses a dry-format classification to eliminate large particles. How the prior art references obtained the particle size distribution as opposed to applicant’s dry-format classification is an irrelevant issue regarding to product claims. Note that, as applicant recognized, the WO’098 patent discloses a primary size of 0.2 μm as the upper limit (page 29) and the Ishii patent discloses primary particle size of up to 200 nm (i.e. 20 μm) as the upper limit (col. 8, last 2 lines to col. 9, line 1). These upper limit values are significantly lower than 5 μm . Therefore, it is necessarily inherent that the particles taught by the WO’098 or the Ishii patents have either zero percent or, at most, less than 0.1 mass% of particles having particle size 5 μm or higher.

Conclusion

7. Applicant's arguments filed December 29, 2005 have been fully considered but they are not persuasive for the reasons set forth above in paragraph 6 above.

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office action (sections 4 & 5 above). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



H. T. Le
Primary Examiner
Art Unit 1773

May 8, 2006